Milwaukee County COVID-19 vaccine data summary

Milwaukee County COVID-19 Epidemiology Intel Team

This report was updated on March 9, 2023 and includes data through March 6, 2023. Note that data for recent weeks may be under-reported due to lags in data entry. This report includes data on primary vaccinations and booster doses.

December 12, 2020 - March 6, 2023			
	Milwaukee County	City of Milwaukee	Subu
otal primary vaccine doses administered	1,188,876	677,914	510,9
Pfizer	719,762	435,272	284,
Pfizer Age 5-11	60,521	31,969	28,
Pfizer Age 6M-4Y	10,950	4,485	6,-
Moderna	356,436	182,783	173,
Moderna Age 6m-5Y	6,446	2,644	3,
Johnson & Johnson	34,761	20,761	14,
otal vaccine doses administered (including oosters)	1,768,723	970,531	798,
Pfizer	968,291	571,130	397,
Pfizer Age 5-11	66,215	34,300	31,
Pfizer Age 6M-4Y	10,993	4,513	6,
Pfizer Bivalent Booster	113,908	62,849	51,
Moderna	505,799	249,340	256
Moderna Age 6M-5Y	6,492	2,659	3
Moderna Bivalent Booster	54,660	21,521	33.
Johnson & Johnson	37,493	22,199	15.
Somison a somison	07,400	22,100	10,
Total individuals with one or more doses	634,657	365,688	268,
Pfizer	372,284	226,734	145
Pfizer Age 5-11	32,219	17,493	14,
Pfizer Age 6M-4Y	4,955	2,268	2,
Moderna	184,065	95,127	88,
Moderna Age 6M-5Y	3,586	1,515	2,
Johnson & Johnson	34,655	20,695	13,
Fotal individuals completely vaccinated	589,891	334,410	255
Pfizer	348,771	209,124	139
Pfizer Age 5-11	28,520	14,642	13,
Pfizer Age 6M-4Y	2,268	730	1,
Moderna	172,712	88,001	84,
Moderna Age 6M-5Y	2,869	1,136	1,
Johnson & Johnson	34,655	20,695	13,
Total individuals boosted	352,240	184,099	168,
Pfizer	208,547	114,516	94,
Pfizer Age 5-11	10,113	4,296	5,
Pfizer Age 6M-4Y	31	8	,
Moderna	116,287	55,463	60,
Moderna Age 6M-5Y	433	157	
Johnson & Johnson	16,824	9,654	7,

Percentage of Population Vaccinated December 12, 2020 - March 6, 2023				
	Overall	Ages 5+	Ages 12+	Ages 16+
Milwaukee County				
*Population	954,209	887,487	796,322	747,409
Received one or more doses	66.5%	70.6%	74.6%	75.3%
Completely vaccinated	61.8%	65.9%	69.8%	70.6%
City of Milwaukee				
*Population	596,886	551,401	489,445	456,809
Received one or more doses	61.3%	65.6%	70.3%	71.4%
Completely vaccinated	56.0%	60.3%	64.9%	66.0%
Milwaukee County Suburbs				
*Population	357,323	336,086	306,877	290,600
Received one or more doses	75.3%	78.6%	81.3%	81.6%
Completely vaccinated	71.5%	75.0%	77.7%	77.9%
*Population estimates from 2018 US Census American Community Survey				

Percentage of Population Boosted			
December 12, 2020 - March	6, 2023		

	Overall	**Booster eligible
Milwaukee County		
*Population	954,209	580,213
Received booster dose	36.9%	60.6%
City of Milwaukee		
*Population	596,886	329,263
Received booster dose	30.8%	55.8%
Milwaukee County Suburbs		
*Population	357,323	250,950
Received booster dose	47.1%	66.9%

^{*}Overall population estimates from 2018 US Census American Community Survey **Booster eligible population is aged 5+ with complete primary vaccination prior to October 7, 2022 for Pfizer or Moderna series, or prior to January 5, 2023 for Johnson & Johnson

Daily COVID-19 doses administered to Milwaukee County residents

Figure 1 shows daily total COVID-19 vaccine doses administered to Milwaukee County residents. A total of 1,768,723 doses (including booster doses) have been administered from December 12, 2020 through March 6, 2023. The dark blue color represents the first dose in a series (Pfizer or Moderna). The light blue color indicates a completion dose (first dose of Johnson & Johnson, second dose of Pfizer or Moderna, or third dose for Pfizer age 6M-4Y). The orange color indicates a booster dose (second dose following Johnson & Johnson or third dose following Pfizer or Moderna series).

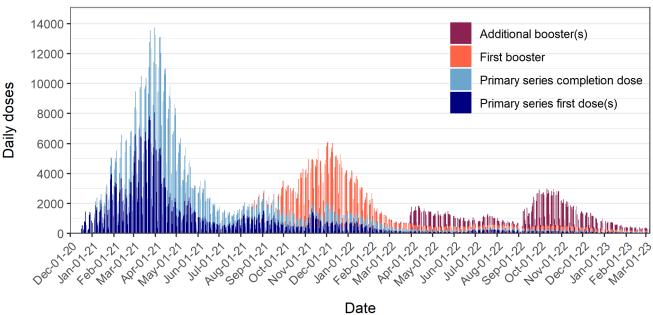


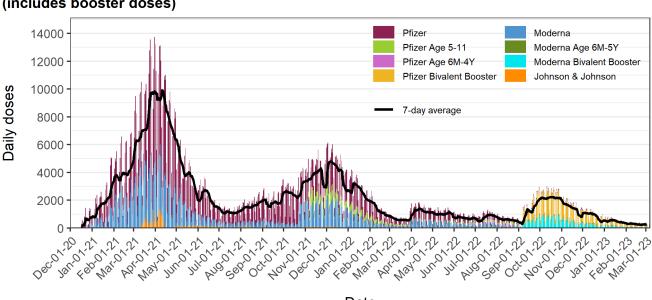
Figure 1: Daily COVID-19 vaccine doses administered to Milwaukee Co. residents

Figure 2a and 2b show daily COVID-19 vaccine doses administered to Milwaukee County residents; **Figure 2a** includes primary vaccination doses only, and **Figure 2b** shows all doses including boosters. The overlaid black line shows the 7-day average of daily doses and the bars are colored by vaccine: Pfizer (red), Pfizer Age 5-11 (green), Moderna (blue), and Johnson & Johnson (orange). Daily primary vaccination doses peaked in late March to early April 2021 and have since declined until mid-summer when slight increases occurred in tandem with increasing cases thought to be driven by the delta variant. An increase in primary vaccination doses is observed in the second week of November 2021, driven by new eligibility among ages 5-11.

Pfizer Moderna 14000 Moderna Age 6M-5Y Pfizer Age 5-11 Pfizer Age 6M-4Y Johnson & Johnson 12000 10000 7-day average Daily doses 8000 6000 4000 2000 48001222 Janol 22 April 22 HOV-07:27 Date

Figure 2a: Daily COVID-19 primary vaccination doses administered to Milwaukee Co. residents

Data source: Wisconsin Immunization Registry (WIR)
Created by the Milwaukee County COVID-19 Epidemiology Intel Team



Date

Figure 2b: Daily COVID-19 vaccination doses administered to Milwaukee Co. residents (includes booster doses)

Percentages of Milwaukee County residents partially and completely vaccinated by age group

Figure 3 shows the percentage over time of Milwaukee County residents who received at least one dose of any COVID-19 vaccine by age group. **Figure 4** shows the percentage over time of Milwaukee County residents who are completely vaccinated with any COVID-19 vaccine by age group. The vertical lines show changes in vaccine eligibility in Milwaukee County.

Age conditions Age 16+ 12-15 workers childcare workers Age 65+ 90% 0-4 Percentage of population 80% 5-11 70% 12-15 60% 16-17 50% 18-24 40% 25-39 30% 40-59 20% 60-79 10% 80+ Parolin Mayora AUS-01-22 , Octob 22 AUDIO 121 58201.21 Decor? Jun-01-22 , jul 01:22 58201.72 HOV.07.72 Potrol 22 May 01.27 Jun-01-21 Jul-01-21 Od.01.21 Mar. 01.27 201. 1.32 1.32 1.32 Date of first dose

Figure 3: Percent of Milwaukee Co. residents with at least one dose of any COVID-19 vaccine

Data source: Wisconsin Immunization Registry (WIR)
Created by the Milwaukee County COVID-19 Epidemiology Intel Team

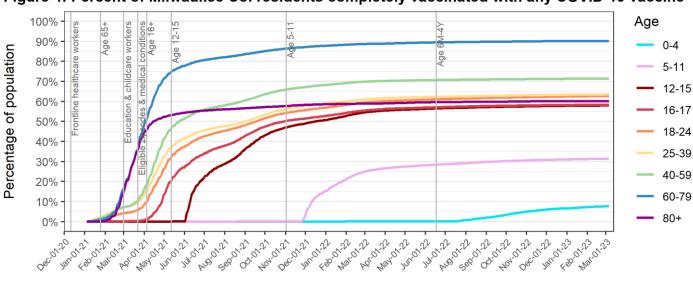


Figure 4: Percent of Milwaukee Co. residents completely vaccinated with any COVID-19 vaccine

Date of primary vaccination completion dose

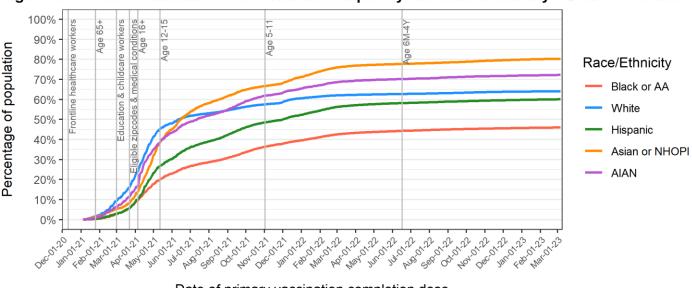
Percentages of Milwaukee County residents partially and completely vaccinated by race/ethnicity group

Figure 5 shows the percentage over time of Milwaukee County residents who received at least one dose of any COVID-19 vaccine by race/ethnicity group. **Figure 6** shows the percentage over time of Milwaukee County residents who are completely vaccinated with any COVID-19 vaccine by race/ethnicity group. The vertical lines show changes in vaccine eligibility in Milwaukee County.

12-15 Age 65+ Education & childcare workers 90% Percentage of population 80% Race/Ethnicity 70% Black or AA 60% White 50% Hispanic 40% Asian or NHOPI 30% **AIAN** 20% 10% AUS-01-22 AUD-01-21 Junol 22 40v.01.22 AQT-01:21 May 01.21 Mr.01.21 58001.21 001.01.21 Mar. 01.27 Decora 2840 E850 WELD ESC WAS 2014 Date of first dose

Figure 5: Percent of Milwaukee Co. residents with at least one dose of any COVID-19 vaccine

Data source: Wisconsin Immunization Registry (WIR) Created by the Milwaukee County COVID-19 Epidemiology Intel Team



Date of primary vaccination completion dose

Figure 6: Percent of Milwaukee Co. residents completely vaccinated with any COVID-19 vaccine

Data source: Wisconsin Immunization Registry (WIR)

Created by the Milwaukee County COVID-19 Epidemiology Intel Team

Percentages of first doses of COVID-19 vaccine administered to Milwaukee County residents by age and race/ethnicity groups

Figure 7 shows the percentage of first doses of COVID-19 vaccine administered per week to Milwaukee County residents by age group. After vaccines first became available to healthcare personnel, middleaged groups (25-59) were the majority of new vaccinees. After eligibility opened up to ages 65+, the oldest two age groups became the majority. The younger age groups (< 60) became the majority of people newly vaccinated since eligibility opened up to education staff on March 1st. With the eligibility of children aged 12+, we observed a sharp increase in vaccination for children. Similar increases were observed with the new eligibility of children ages 5-11, and later for ages 6M-4Y.

Figure 8 shows the percentage of first doses of COVID-19 vaccine administered per week to Milwaukee County residents by race/ethnicity. Non-Hispanic Whites were the majority of newly vaccinated individuals for many months, however Black/AA and Hispanic groups have become an increasing proportion of the newly vaccinated over time.

of first doses per week 90% 80+ 80% 60-79 70% 40-59 60% 25-39 18-24 40% 16-17 12-15 5-11 0-4

Figure 7: Percentage of total first doses per week by age group in Milwaukee Co.

Start day of week

Data source: Wisconsin Immunization Registry (WIR) Created by the Milwaukee County COVID-19 Epidemiology Intel Team

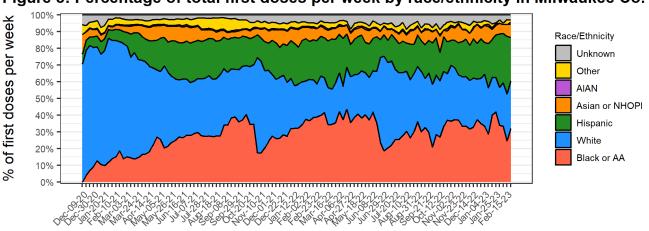


Figure 8: Percentage of total first doses per week by race/ethnicity in Milwaukee Co.

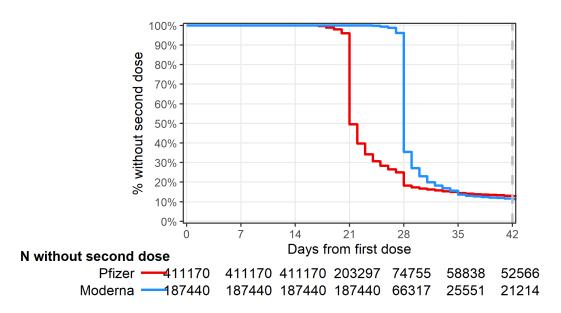
Start day of week

Completion of primary immunization series among Milwaukee County residents who received at least one dose of Pfizer or Moderna vaccines

Figure 9 describes the timing between primary vaccination doses for Milwaukee County residents who received Pfizer or Moderna vaccines. This graph includes data for residents who received their first dose of Pfizer or Moderna at least 42 days ago (prior to January 22, 2023). The recommended interval for receiving the second dose is 21 days for the Pfizer vaccine and 28 days for the Moderna vaccine; the second dose is considered valid if administered 4 days prior to the recommended interval and up to 42 days following the first dose for each vaccine.

Fully 87.7% of all residents who received their first dose of Pfizer prior to January 22, 2023 received their second dose within 42 days, indicating very strong completion within guidelines for those receiving a first dose.

Figure 9: Vaccine series completion among Milwaukee Co. residents receiving Pfizer or Moderna



Summary of vaccine series completion and booster rates among vaccinated Milwaukee County residents

Table 1 summarizes the rates of primary vaccination series completion and booster uptake by groups based on first vaccine product received, age, sex, and race/ethnicity. The first column, rates of primary vaccination series completion, includes data for residents who received a first dose of Pfizer or Moderna at least 42 days ago; 42 days is the maximum recommended period for receiving the second dose. The second column, rates of booster uptake, includes data for booster eligible residents only; booster eligibility criteria are currently age 12 or older, with one dose of Johnson & Johnson vaccine at least 2 months ago or completion of Pfizer or Moderna primary vaccination series at least 5 months ago. While vaccine series completion rates are high and vary only slightly among groups, receipt of booster doses among booster eligible individuals varies significantly by vaccine product, age, and race/ethnicity with slight variation by sex.

Characteristic	Percent with second dose within 42 days among Pfizer and Moderna receipients ¹	*Percent boosted among eligible ¹
First vaccine received		
Pfizer	358,604 / 411,170 (87.2%)	218,493 / 373,268 (58.5%)
Moderna	166,226 / 187,440 (88.7%)	116,274 / 172,318 (67.5%)
Johnson & Johnson		16,824 / 34,627 (48.6%)
Age		
0-4	5,444 / 8,130 (67.0%)	
5-11	25,364 / 32,183 (78.8%)	10,080 / 27,576 (36.6%)
12-15	26,512 / 30,539 (86.8%)	12,310 / 28,074 (43.8%)
16-17	13,250 / 15,183 (87.3%)	6,456 / 14,077 (45.9%)
18-24	48,381 / 59,008 (82.0%)	23,545 / 56,107 (42.0%)
25-39	123,929 / 144,391 (85.8%)	71,768 / 140,767 (51.0%)
40-59	143,860 / 160,203 (89.8%)	103,184 / 164,115 (62.9%)
60-79	118,287 / 127,464 (92.8%)	105,724 / 128,353 (82.4%)
80+	19,803 / 21,509 (92.1%)	18,524 / 21,144 (87.6%)
Sex		
Female	281,862 / 320,239 (88.0%)	192,347 / 308,324 (62.4%)
Male	241,901 / 276,958 (87.3%)	158,698 / 270,697 (58.6%)
Unknown	1,067 / 1,413 (75.5%)	546 / 1,192 (45.8%)
Race/Ethnicity		
Black or AA	97,316 / 119,376 (81.5%)	57,391 / 112,602 (51.0%)
White	287,462 / 313,223 (91.8%)	217,121 / 311,486 (69.7%)
Hispanic	73,226 / 86,978 (84.2%)	40,469 / 82,965 (48.8%)
Asian or NHOPI	29,866 / 34,339 (87.0%)	16,886 / 31,957 (52.8%)
AIAN	2,972 / 3,398 (87.5%)	1,910 / 3,312 (57.7%)
Other	19,546 / 22,552 (86.7%)	11,051 / 21,489 (51.4%)
Unknown	14,442 / 18,744 (77.0%)	6,763 / 16,402 (41.2%)

¹n / N (%)

^{*}Booster eligible population is aged 5+ with complete primary vaccination prior to October 7, 2022 for Pfizer or Moderna series, or prior to January 5, 2023 for Johnson & Johnson

Data Sources & Acknowledgments

This report was created by faculty and staff in the Medical College of Wisconsin (MCW) Institute for Health and Equity (IHE) in partnership with representatives from local health departments and faculty from the University of Wisconsin-Milwaukee Zilber School of Public Health. Data sources include the Wisconsin Immunization Registry (WIR) and the US Census Bureau.

Contact Information

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